may here remark that many excellent remedies have fallen into odium and neglect, at different periods, from the error or abuse of their application. I am careful that all the ingredients which enter into the composition of the inhaling mixture are perfectly pure. I recommend the following formula. ℞.—Iodinii puri; iodid. potassii, āā gr. vi; aquæ distillat. ℥v, ℥vi; alcoholis ʒii. M. fiat mistura, in inhalationem adhibenda.

I now always prefer to add the conium at the time of mixing the iodine solution with the water; and it should be a *saturated* tincture, prepared with the most genuine dried leaves. In the commencement of the treatment, I advise very small proportions of the iodine mixture; for example, only from half a drachm to a drachm for an inhaling of eight or ten minutes, to be repeated two or three times a day. Of the soothing tincture, I direct half a drachm—which I usually find sufficient: but it may be increased if the cough be very troublesome. I soon augment the quantity of the iodine, and progressively from ʒj to ʒiv; but also, then prolonging the time of inhaling, I divide the iodine dose, putting two-thirds at first, and the rest after the expiration of seven or eight minutes. If the temperature of the water be measured by the thermometer, it should be 120° Fahr. as being the most favourable for volatilizing the active principles of the iodine and conium, mixed with some watery vapour; but the approximation will be sufficient, if equal parts of boiling and cold water be used; with which the inhaler is not to be quite half filled. Invariably, however, care should be taken to prepare the bottle for this heat of water, by first washing it out with some tepid water.

During the process, the inhaler should be kept immersed in a jug, containing water of rather higher temperature than 120°.

It is of the utmost importance that the strength of the inhaling mixture should be considered in relation to the particular case. The feelings of the patient will be a great guidance; he should have the sense of relief, and not of inconvenient irritation, produced. The cough arising occasionally during the process is not an objection; but if it be more irritable afterwards, it shows that it has been used too strong. There is a certain stage of the tubercular disease, when over-excitement, from employing the iodine in too great quantity, might hurry on the softening process too quickly. It is here that the treatment demands the greatest judgment. In every case one of the following events may be expected to happen; either that the tubercular irritation will be arrested and gradually removed, be arrested and suspended, but not cured, or pass on to the softening process, which terminates in the production of an excavation. In all these different states of disease, I advise the inhaling treatment to be employed.

It is my belief that this direct and very accurate mode of applying this powerful medicine, iodine with conium, induces a new action in the vessels and nerves of the lungs, which is calculated to supersede the diseased action. I also assign much effect to the stimulation of the absorbents, and have been led to believe that tubercles have in this manner been actually removed.

With a well constructed glass inhaler I find all the satisfaction I can desire. The bottle should be large, and the tubes capacious. The one issuing from the bottles should be upright, passing off in a gradual slight curve, so that the vapour shall not be much cooled in the course of its progress; the ingress tube should dip very near to the bottom of the bottle, that all the air so introduced may receive impregnation. The patient must be desired to inhale by using at the same time suction and a pretty full inspiration, then to drop the under lip from the mouth-piece and make a free expiration; so conducting the process by pausing, and, if he like, little suspensions, in order that he may not experience any of the fatigue which would certainly happen if breathing quickly, or using an inhaler with small tubes, or with too much water in the bottle.—*Braithwaite's Retrospect*, from *Lond. Med. Gaz.*, Feb. 1840.

23. *Remarks on Conium.* By W. H. Judd, Esq.—After detailing a number of experiments on animals, to show the value and strength of the extract of conium, as procured from different druggists, Mr. Judd draws some practical

conclusions which will be read with interest. On comparing the effects of conium with opium, we find a most remarkable difference after death as will be seen by the following comparison.

A comparative view of the effects and changes after Conium, and of those after Opium.

CONIUM.	OPIUM.
Brain unnaturally free from blood;	Brain gorged by blood.
Ventricles almost dry;	Ventricles full of serum.
Lungs empty of blood;	Lungs so full of blood that it runs out in a stream on cutting them.
Stomach, its villous coat and œsophagus, white;	Villous coat, and œsophagus red.
Right side of the heart gorged by dark blood, left empty;	The heart's cavities all containing blood.
Heart dead to stimuli;	Heart's state as to excitation unknown.
Intestines active and white;	Intestines inactive, red and inflamed.
Blood, dark and fluid in both veins and arteries;	Blood found fluid at times, not always.
Death of the heart;	Death of the brain, I conclude, from the other symptoms.

From comparing the state of the viscera, we have here positive proof that the effects of preparations from these two plants differ widely. Indeed I much doubt whether conium, which has hitherto been classed as a narcotic, is, by its direct action, capable of producing sleep, by rendering the vessels of the brain turgid, as opium does; on the contrary, for in the animals experimented upon, the brain was found exsanguined and blanched after conium had been given to an extent that destroyed life. During these experiments I observed a defluxion being produced in the human subject, and a cough being kept quiet from breathing the vapour of the muriate of conium, which pervaded the room in such volume that it clung to our skins, tasted upon our lips and impregnated our clothes for days, yet no disposition to sleep was induced by it. Last night (April 4th) I took a dose of the best extract to ascertain its effect. At first I felt excited and kept awake, and the heart acted during that time quicker than natural; next the breathing became slower, the contractions of the heart feeble, and the pulse small and weak. I fell asleep whilst counting my pulse, and found on waking in the morning that I had just overslept my usual time by one hour. Conium in small doses, by its action on the heart, lessens for a time the volume of blood sent to the brain and muscles, and thus undoubtedly produces a state of quietude that disposes in a remarkable degree to repose.

Mr. Judd concludes his interesting paper by drawing our attention to the vast power displayed (during the experiments) by its extract in lessening the quantity of blood sent to the brain and medulla spinalis—to its lessening the forcible contractions of the heart; virtues possessed by few medicines with which we are acquainted; to which evidence I may add the no trifling experience of Professor Christison, when he says that "Conia exhausts the nervous energy of the spinal chord." These physiological facts at once suggest that conium should prove an invaluable remedy in the treatment of three very fatal diseases for which we possess no specific, viz., hypertrophy of the heart, phrenitis, and inflammation of the medulla spinalis. The latter disease is one that, like Atropos in the dark, cuts the thread of life in many cases wherein the cause of death (the theca not being opened) is never discovered. In the treatment of such diseases, after depletion, I should recommend that small doses of the extract of conium, without waiting for the action of purgatives, be steadily repeated every two hours until the action of the remedy is manifest in the system, or mitigation of the symptoms ensue. In hypertrophy of the heart, the remedy should be given rather more cautiously; and by properly graduated doses, I imagine we might regulate the hurried and forcible contractions of that viscus, and bring its action almost to nature's standard. Lastly, habitual costiveness, and want of secretion in the bowels, may often be remedied by two or three grains of extractum conii, with as much pilula hydrargyri given at bed time; this will be slowly followed by regular evacuations. The above combination of drugs acts particularly upon the rectum; and, when the dose is too often repeated, produces in some a sort of chronic dysentery. I throw out these hints to the profession after having witnessed the power of conium in reducing the action of the heart, to exsanguine the brain and medulla; and may safely assert, if physiological experiments teach us anything as to the nature of remedies, that then is conium a valuable auxiliary in these diseases.

With respect to the time and way of gathering the conium, which is of the greatest consequence, if we wish for the full power of the drug, Mr. Judd says —I should say in June, just as it breaks into flower, and those growing in dirty, boggy situations should be preferred, as they are the most potent. This has been practically proved by a medical friend of mine.* It is undoubtedly needful that the collectors should taste each stem as they gather it, and cast away such as are tasteless, and too young to be sapid. A learned gentleman of this society, in one of his excursions, (I allude to Dr. Hancock,) had the ingenious curiosity to taste stems of growing conium, on the banks of the Bristol Channel; and he kindly communicated to me, that late in the year, about September, few of them possessed any flavour, and that many of them then were totally useless.—*Braithwaite's Retrospect*, No. 1, from *Med. Bot. Trans.*, vol. i. pt. 4.

24. *On Disease of the Brain Dependent on Disease of the Heart.*—Dr. ROBERT LAW brings before the profession in a very able paper in the *Dublin Journal of Medical Science*, for May last, his views of those diseases of the brain, which are chiefly owing, not, as is generally supposed, to the *excess* of blood in the brain, (which excess may arise either from too great a determination to it, or from a congested state of it owing to obstruction of the blood in the lungs or other parts, from disease of the heart,) but to the *deficient supply* of it, arising from disease either of the sigmoid or mitral valves.

He states that Dr. Corrigan was the first who accurately described this disease, and the perniciousness of the usual mode of treating it by depletion, instead of by stimulation: and as it is a very important pathological distinction, and which is not sufficiently known or attended to by the profession, we take the liberty of placing a few extracts before our readers.

If we are called to a case of diseased brain, accompanied by hemiplegia, or symptoms which would at first sight indicate congestion or inflammatory action, it is our duty immediately to ascertain if these symptoms may not be owing to disease of the heart or valves; and if we suspect that there is disease of the aortic valves, causing hypertrophy of the left ventricle, and preventing the blood reaching the brain with sufficient ease; or if we suspect either a too open or a too contracted state of the mitral valves, causing in the former case a regurgitation of blood from the ventricle, and in the latter case a difficulty in its course into the ventricle from the auricle—we must be on our guard not to deplete but to stimulate; as is very clearly shown to be correct practice by Dr. Law in several cases which he relates. He affirms that if there be obstruction to the flow of blood before the arteries going to the brain are given off, that disease of that organ will not be owing to a fulness of blood in it, but to a deficiency; but on the other hand, if obstruction exist beyond the origin of the cerebral arteries, then the regurgitation of the arterial blood may very probably be towards the brain.

Dr. Law says, pathologists have almost entirely confined their attention to the excess of the normal quantity of blood or the congestion produced in organs by disease of the heart, but have overlooked the deficiency that must necessarily result to other organs, and consequent hurt to their nutrition and function. Thus

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* Mr. Goodger, late of the Marylebone Infirmary.